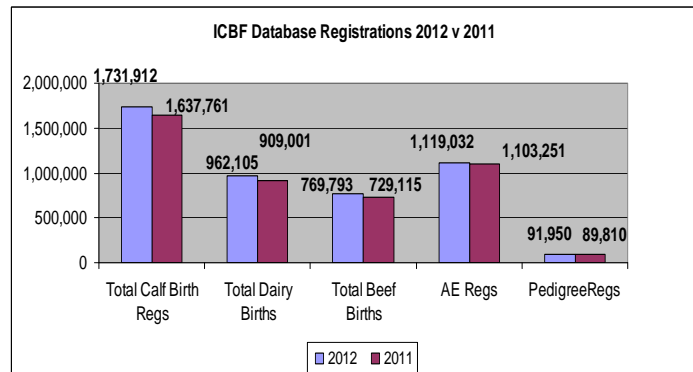
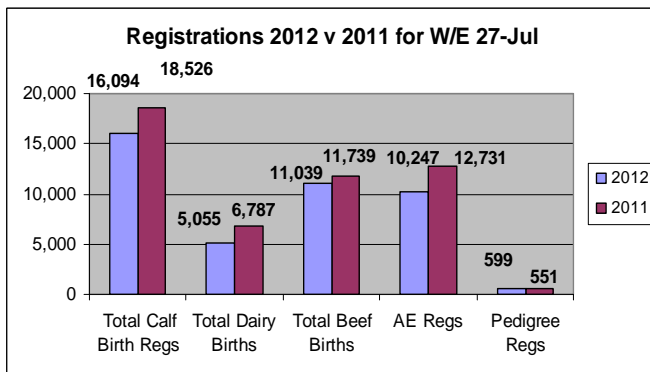


ICBF Weekly Update 27th July 2012

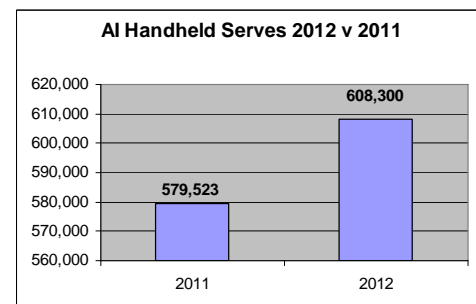
1 Important Dates

- Herdbook Technical Meeting** - Wednesday 22nd Aug, 10:30 to 13:00, Killeshin Hotel, Portlaoise.
- ICBF Board Meeting** - Thursday 6th September, 10:30 to 14:00, ICBF, Highfield House, Bandon.
- Interim Sheep Board** – Thursday 20th September, 11:00 – 14:00, ICBF, Highfield House, Bandon.

2 Database



- The stats above are compiled with the assistance of DAFM AIM systems.
- In the Suckler scheme, the number of 2011 born calves with meal introduced is 638,911 with the number of animals weaned at 576,749.
- BVD test results continue to be received at ICBF and are being processed accordingly. Around 576,000 tissue tags for BVD testing have been purchased at this stage. Around 418,000 samples have been returned at this stage, with a 0.61% BVD Virus Positive rate.
- Final testing on the Slaughter reports are now completed and the reports are currently being run.
- The development around incorporation of the new genomic evaluations for type on the Genomic Evaluation Report is currently being tested.
- Work continues on the modification of systems to incorporate proposed changes to the Beef EuroStar indexes.
- Work is continuing on the back-end ICBF web infrastructure with a view to making it more standardised and robust.
- The graph shows Inseminations recorded on AI Handhelds in 2012 compared with 2011.



3 Sheep Ireland

- This week EuroStar reports have been sent to each participating breeder. The evaluations in these reports should not change to any significant degree for the remainder of the year as the vast majority of recorded information is now being included in each weekly evaluation. The majority of our MALP & CPT data is now on the database along with all the pedigree records. Although it is essential for Sheep Ireland to post these reports to each flock owner, it is also essential that each breeder knows how to access their online Euro-Star profile which is updated

weekly. By accessing this profile, breeders can track changes in their flock's genetic progress. Any breeder not yet using this online profile should contact Sheep Ireland as a priority.

- ✚ Entry forms for our LambPlus sale were also sent out. The sale will take place in Tullamore on Saturday 25th August. I have no doubt that we will have higher number of ram entries than Kilkenny last year, it will be Sheep Irelands challenge to advertise the sale strongly enough to ensure there will be buyers for these top recorded rams. The entry criteria has increased slightly from last year's sale - the minimum criteria for accuracies is now 20%, and we will continue to raise the standard in this regard for future events.
- ✚ An explanation of the importance of accuracy and ways to improve flock accuracy was included with each entry form. Every breeder now has an opportunity to establish a strong foundation of high accuracy evaluations for their flock. As commercial ram buyers become more educated about buying high genetic merit rams, it will be the breeders with high accuracies that will be best positioned to benefit. Low evaluation accuracies are one of the biggest challenges our breeding programme faces, but there are easy ways for every breeder to improve their situation, the first step is to contact Sheep Ireland to discuss.
- ✚ Finally we have sent out sheets for breeders to record mature ewe weights. These weights should be collected in advance of this year's breeding season. We are currently using Ultrasound scanning and lamb weights to predict ewe mature weights in our evaluations. Having actual mature weights will help eliminate the need for predictions and where predictions are necessary make them more reliable, again with a view to improving the accuracy of the evaluations.

4 Cattle Breeding Consultation Meetings

The ICBF Cattle Breeding Consultation meetings took place this week with 40 people attending representing the full range of stakeholders in Irish dairy and beef cattle breeding.

Key developments include:

Dairy

- ✚ A new management index is being developed that will include traits such as milking speed, temperament, milk yield and SCC.
- ✚ Good progress is being made on the new labour index. 4000 surveys will be targeted at dairy farmers to obtain information in four main areas (milking process, cow health and care, calf health and care & fertility).
- ✚ The process of developing linear type evaluation for dairy cattle in Ireland is complete. This will replace a system which was operated jointly with the UK. The new model is now more reflective of Irish production systems and it is resulting in little re-ranking of bulls when compared to the old system.
- ✚ Research work is currently looking at the heritability of genetic defects. Results to date have shown poor heritability's, which may be due to poor recording of traits.
- ✚ The new cow production index (CPI) is progressing very well. It takes into account non-additive genetic effects such as heterosis and recombination loss along with permanent environmental effects which are not passed onto offspring and therefore not in the current EBI.
- ✚ Low density (LD) chips are now being used in genomics. They are the same price as the 3k chip which was used up to now. The benefits of the LD chip over the 3k chip include increased imputation accuracy and better call rates. The call rate for genotypes is 98% with an average turnaround time of 23 days from the time of hair sampling on-farm to results. This is in relation to AI requested animals. The sire error is 6.5%; however this is

now reduced to 1.5% by checking against all the sires that are currently genotyped. Research is on-going looking at a one-step evaluation which would involve the integration of genomic and non-genomic information.

- ✚ 77 Elite heifers have been purchased for the Teagasc next generation herd with a minimum genomic EBI of €175. 11 control heifers that represent the national herd were also purchased with an average EBI of €100. This research herd will have a very important role in helping farmers increase profit from their herds.
- ✚ The average EBI of bulls tested on the GI program has increased from €103 in 2005 to €113 in 2012. This has seen a €13.8 increase year on year since 2005, which has exceeded the €11.5 target set out by the program.

Common to Dairy & Beef

- ✚ Analysis of birth weight measurements collected over the past years have shown chest circumference and height at shoulder explained the highest amount of variation (R^2 of 0.64 and 0.46, respectively) from the four linear traits measured.
- ✚ Research work is on-going to identify traits and then develop an index for functionality in bulls.

Beef

- ✚ The ICBF weight recording service is available nationally, with a cost of €60 for the first 15 animals (includes call-out). It is an extra €2.50/animal between 16-30 animals weighed and €1.25 for each animal after 30. On the day of weighing the farmer receives a detailed print out of the recorded weights. Farmers signed up to HerdPlus will receive a more detailed report online.
- ✚ Farmers using the ICBF weight recording service can now get predicted live-weights as part of the weighing report. This can help them in making management decisions, for example, in the grouping of animals for feeding.
- ✚ New indexes (maternal, terminal & dairy) for beef animals will be introduced as part of the next proof run on the 20th August 2012.
- ✚ A study by Teagasc has shown further evidence that Euro-Star index is a good measure of the contribution of genetics to farm profits. The study looked at the association between ICBF maternal proofs i.e. maternal weaning weight and “on-the-ground” highly accurate phenotypes i.e. milk weight, using 105 first parity cows. The study showed that the high index cows for maternal had more milk and therefore heavier animals at weaning.
- ✚ Teagasc have commenced a study looking at validating the new maternal index. High and low genetic merit beef cows will be sourced from both dairy and beef herds making the study applicable across both replacement strategies.
- ✚ Research on genomic selection in beef has shown it to be an improvement on traditional evaluations i.e. 5% increase in reliability for some traits. Although research in genomics is on-going these initial results are a positive development for the beef industry.
- ✚ 78 commercial bulls have been purchased for Tully. All bulls were born between 1st August and 30th September 2011. They consist of 34 different sires across 10 breeds. Data will be captured on these animals in three main areas (1) feed intake and efficiency (2) carcass and meat eating quality (3) Health and disease traits.
- ✚ The new GEN€IR€LAND Maternal Beef breeding program is at an advanced stage and will be rolled out to breeders in September of this year.
- ✚ Presentations on all other areas of research were made at the industry meetings on Wednesday. The presentations are available in the publications section of the website. Feedback on any of the issues presented on the day is welcomed.

5 Genetic Evaluation

- Evaluations for the next routine dairy and beef run are underway. Official publication of proofs is 20th August.
- The latest batch of genomic evaluations was released during the week. The majority of animals currently being done are 2012 born dairy females.

6 Milk Recording

National Milk Recording Statistics - Herds, Cows & EDIY 27/07/12						
Milk Recording Organisation	Total Herds Recorded YTD 27/07/12	No. EDIY Herds YTD 27/07/12	% Herds EDIY	Total No. Cows Recorded YTD 27/07/12	No. EDIY Cows YTD 27/07/12	% Cows EDIY
Munster	3,732	1,086	29%	301,110	93,836	31%
Progressive	2,436	982	40%	216,501	88,907	41%
Tipperary	119	42	35%	9,854	3,223	33%
Total	6,287	2,110	34%	527,465	185,966	35%

Recorded Cows by Milk Recording Organisation - Year on Year Comparison			
Milk Recording Organisation	YTD 2011 Cows Recorded 01/01/11 - 27/07/11	YTD 2012 Cows Recorded 01/01/12 - 27/07/12	2012 vs. 2011 Year on Year Difference (%)
Munster	297,065	301,110	1.3%
Progressive	208,383	216,501	3.7%
Tipperary	12,927	9,854	-31.2%
Total	518,375	527,465	1.7%

National Milk Recording Averages by Province - 10 day Period 7/07/12 to 27/07/12								
Provincial	No. Herds Recorded	No. Cows Recorded	Average Herd Size	Average 24hr Milk kg/Cow	Average Fat %	Average Protein %	Average F + P kg	Average SCC
Munster	835	65,296	78	21.3	3.89	3.35	1.54	212
Leinster	316	26,371	83	21.3	3.81	3.35	1.52	228
Connacht	98	6,525	67	23.6	3.68	3.29	1.64	212
Ulster	92	6,840	74	22.6	3.81	3.31	1.61	208

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